

System Configuration Team (SCT)
Reasonable & Prudent Measure #26
Meeting Notes
July 21, 1997

Greetings and Introductions.

The July 21 meeting of the System Configuration Team was held at the Northwest Power Planning Council's offices in Portland, Oregon. The meeting was co-chaired by Jim Ruff of the Northwest Power Planning Council staff and Bill Hevlin of NMFS. The agenda and a list of attendees for the July 21 meeting are attached as Enclosures A and B.

The following is a distillation (not a verbatim transcript) of items discussed at the meeting, together with actions taken on those items. Please note that some enclosures referenced may be too lengthy to routinely include with the meeting notes; copies of all enclosures referred to in the minutes are available upon request from Kathy Ceballos of NMFS at 503/230-5420.

One preliminary comment, said ODFW's Ron Boyce -- is there any interest within this committee

to have some discussions with the Tribes to try to reach a compromise or consensus on some of the contentious items in the FY'98 CRFM program? I think it would be worthwhile to sit down, as a group, to try to develop an SCT consensus which includes the Tribes, he said; speaking for myself, at least, I think there may be some room for compromise. Because if we can't reach agreement on the SCT program, we're really going to be hurt -- in fact, we're being hurt already. Do other SCT members think that effort would be worthwhile?

Something I would appreciate would be an opportunity to thoroughly discuss the technical arguments, pro and con, for and against these three issues, said CRITFC's Bob Heinith. To date, I don't think we've really had that discussion. I've heard the criticism that I was too selective in my choice of supporting literature, he said, and if there is opposing literature, I would like to see that.

I agree that that would be worthwhile, said Boyce, but what I had in mind was more a discussion of specific FY'98 project priorities -- can we put together a list of projects for FY'98 that we can all live with? I'm hesitant to get bogged down in debating or attempting to resolve some of the technical issues to which you're alluding. I'm talking about the three main bones of contention -- Lower Granite surface collection, John Day extended-length screens and the passage improvement work at Bonneville, he said. What can we negotiate to move forward on those three dams?

I guess we could revisit those projects, said Heinith, but at Bonneville, for example, you're at a point where you either go ahead with the pipe or you don't -- I'm not sure how much room there is for compromise. My point is that there would be value in negotiating a common set of

projects we can all live with, said Boyce, as opposed to having CRITFC go off and push their position, and us getting further and further dug in on our position. I'd certainly be willing to take a shot at it, said Heinith.

I'm certainly willing to compromise, said WDFW's Rod Woodin, but you've got to have a strong technical basis for whatever path you take in this process. If you alter your path for the sake of compromise on a policy level, that does not have technical merit. So you're saying any compromise will need to be technically justifiable? asked Boyce. Correct, Woodin replied. There has been a lot of back-and-forth about the technical merits and detriments of various projects over the past year, and I don't see much value in reopening that debate.

This is all going to come up in the course of today's discussion of the FY'98 project list, the first item on the agenda, said COE's Witt Anderson -- why don't we make our way through that item, then come back to Ron's proposal? I would add that we've had a Bonneville subgroup working since last December to flesh out the technical details of the program there, and to put together a package that would be acceptable to everyone in the group, said Hevlin. They were unable to develop a mutually-acceptable package of projects, so we went through a couple of months of work to develop the IT briefing papers. I guess my point is, if compromise is a possibility, it's out of SCT's hands -- we've provided the technical input, and it's up to the policy-level folks at NMFS, the Corps and the Tribes, with input from the states, to hammer out a final decision.

The group spent a few minutes discussing some of the technical details of CRITFC's alternative approach to Bonneville passage improvements. I don't see anything in Bob's proposal that will improve survival at Bonneville over the next five years, Woodin said -- you can't spill any more water at the project than you're already spilling. You can install more flip-lips at Bonneville, and you can investigate spill efficiency there, Heinith replied -- we don't even know what spill efficiency is at Bonneville. We did incorporate many of Bob's ideas in the Bonneville paper, said COE's Bob Willis. He provided some data on surface collection at Powerhouse I; we included a guidance curtain as well as other measures CRITFC had proposed, in an effort to put together a mutually-acceptable package. One thing the paper didn't say, however, is that we should halt everything while we research other possible alternatives.

One technical question we had about Bob's proposal was, even if you can increase spill efficiency at Bonneville, you're still going to have fish going through the powerhouses when they're operating, Willis continued. We know that when there are fish in that area, there is very large mortality there. Unless we can incorporate an effective guidance curtain and surface bypass technology to increase the number of fish diverted over the spillway, said Boyce. We would need to move a good portion of the fish away from the powerhouse, said Willis. It's an untested technology, said NMFS's Steve Rainey -- if you're hoping to put in a curtain and guide 90% of the juveniles away from Powerhouse II and to the spillway, that's probably not realistic.

Testing surface bypass at Bonneville wouldn't preclude our ability to make the JBS improvements in the future, said Boyce -- it would just defer them. However, that delay is going to have a cost, in terms of lost opportunity to improve interim survival, said NMFS's Gary Fredricks. Unless you hit a home run the first time out, it's going to take years to design, test and implement the kind of surface collection system we're talking about here. If we defer this package of improvements at Powerhouse II, we're deferring them until at least 1999, said Anderson.

It sounds like people are pretty much falling back to their entrenched positions, said Boyce, which isn't necessarily conducive to productive discussion. If that's the case, there isn't much point in prolonging it. What you're really asking us to grapple with here is a policy question -- the "forest" issue of the best place to spend that \$45 million, said Hevlin. Do we spend it on the outfall, or do we save it, while we conduct further studies? Within NMFS, we've presented the various technical arguments to our leaders, and frankly, I think there is still some possibility of compromise with the Tribes. However, that compromise isn't going to be worked out at this level -- we've already established the technical basis for our recommendation.

Discussion of FY'98 Project List -- Identification of Lower-Priority Items.

Anderson introduced Will Garber and Bob Arthur of the General Accounting Office, on hand today as observers. The GAO has been asked by Congress to take a look at four research questions related to the Corps' Columbia River Fish Mitigation program, said Garber: first, to try to get a handle on the Corps' decisionmaking process for identifying, prioritizing and selecting fish mitigation projects at the Lower Columbia and Lower Snake dams; second, to look at the Corps' implementation of those projects; third, to look at how the Corps funds, schedules and implements operations and maintenance activities that affect salmon; fourth, to look at fish mitigation projects at the PUD projects in the Columbia Basin, to see if they might provide a basis for comparison with the Corps' activities. Our plan at this point is to develop a written report to Congress by March 1998, Garber said.

At the last meeting, we separated the FY'98 project list into high, medium and low-priority items, and did some prioritizing of the medium-priority list, Hevlin said. Since that meeting, the Corps, as requested, has broken out many of the individual activities, and their costs, within some of the major projects on the list. Witt Anderson has also taken a shot at removing some of the activities from these various line-items, without cutting complete projects -- more of a surgical approach to cost reduction, in other words, Hevlin said. We thought this strawman might provide a good starting-point for today's discussion of the FY'98 project list.

We've also distributed a package of annual work plan summaries related to the \$40 million in medium priority or "grey-area" projects we discussed last time, Anderson said. This package is attached as Enclosure C. A much more detailed package of the work plans themselves was also made available; this document, too lengthy to attach, is available upon request from Kathy Ceballos of NMFS at 503/230-5420 (please ask for Enclosure D).

These workplans are drafts at this point, Anderson said; we're looking for some input from SCT in terms of the substance, scope and focus of the workplans themselves, as well as on the usefulness of the workplans to SCT. Any feedback you might have on those two points would be useful.

I've also distributed a new version of the FY'98 CRFM project spreadsheet, the same document that has provided the basis for our discussion at previous meetings, revised to reflect updated cost information where we now have better estimates or actual bids, Anderson said (the spreadsheet is attached as Enclosure E). The fourth document I have today (Enclosure F) is the strawman program budget Bill referenced earlier, Anderson said -- basically, I wanted to take a shot at

seeing what a \$100 million or a \$110 million program might really look like, as a way to focus discussion.

To set the stage for that discussion, Anderson continued, both the House and the Senate have now taken action on the Corps' FY'98 budget request. The Senate recommended an appropriation of \$117 million, and went along with the Power Planning Council's suggestion that the region, through the SCT, make decisions about where we would make up the shortfall -- in other words, the Senate did not say, "Do this, but don't do that," as they've done in previous years, Anderson explained. The Senate document also includes language that allows us to move forward, in FY'98, with developing the scoping document for John Day drawdown studies, with that scoping document to be delivered to Congress within 90 days of enactment of the act, he added.

The House, on the other hand, recommended \$85 million, Anderson said; the House language did not include the reference to the scoping document for the John Day drawdown studies. According to my sources on Capitol Hill, what we're actually likely to see in terms of a final appropriation for FY'98 is somewhere between \$100 million and \$110 million, Anderson said, probably closer to \$110 million. What that means in actual dollars is, if we do get a \$100 million appropriation, we would likely lose 5% in savings and slippage, but we'll also have some carryover from FY'97 -- according to current estimates, somewhere between \$3 million and \$4 million. The bottom line is, a \$100 million FY'98 appropriation will mean about \$99 million in actual dollars, Anderson said. A \$110 million appropriation would give us about \$108 million in actual dollars. Also, he added, from what I've heard, the Senate appropriations language is likely to prevail, which means the final appropriation will include the John Day scoping document approval as well as the suggested language from the Council.

So with that in mind, Anderson said, perhaps the best way to proceed would be for us to spend a few minutes going through the strawman (Enclosure F) line by line, to develop a low-end (\$99 million) and a high-end (\$108 million) FY'98 budget priority list. For those items that fall inside the range from \$99 million to \$108 million, he added, it would be very helpful to develop clear priorities -- 1, 2, 3, 4 etc., such that, when we get the final appropriation in August or September, we know exactly what those priorities are.

In the meantime, we're coming up on our contracting award dates for certain projects, such as the test flume, which may fall into the grey area, Anderson said -- we have to decide now whether or not those projects are going to go forward. We still have a little time on most of the program, before the start of the fiscal year. The tougher question is projects like the flume which require a decision, if they're to stay on schedule, prior to our knowing what the exact amount of the FY'98 appropriation will be.

Heinith raised the possibility of asking a subgroup of the Independent Scientific Review Panel to look at whether or not the CRFM program is taking the region down the right road for the recovery of salmon in the Columbia River Basin, in the context of objectives and tasks laid out in the Tribal and Council Recovery Plans and the NMFS Biological Opinion. How would the Corps feel about having an independent scientific review of their program? he asked. I don't think we would have an issue with that, Anderson replied.

The group spent most of the morning session going over CRFM FY'98 Program Options

spreadsheet (Enclosure F), discussing some of the specific cost reductions it suggests and making a number of additional suggestions. Note that "Option 1.0" reflects the suggested funding level for each item under a low-end (\$103 million) appropriations scenario, while Option 1.1 is the suggested funding level under a high-end (\$107 million) appropriations scenario. The following is a summary of that debate, including major discussion items and any changes in funding levels recommended at the meeting:

? Lower Granite Surface Bypass Program: The funding level recommended for this item under Option 1 reflects an \$840 K reduction from the original amount requested; the suggested \$16.82 M Option 1.0 funding level includes the 1998 surface collector prototype test, monitoring and evaluation, plus \$500 K for continued planning and design of the dewatering system. The \$500 K does not include any dewatering system construction dollars. 7/21/97 SCT Recommendation: There may be an opportunity to save \$500 K by deferring the planning and design of the dewatering system.

? Ice Harbor Flow Deflectors: This item was listed at \$1.633 M under both "Current Estimate" and Option 1.0; the cost of this item is likely to increase by \$500 K in FY'98. 7/21/97 SCT Recommendation: Fund at \$2.133 M in FY'98.

? John Day Extended Screens Implementation: The amount shown for this item under "Current Estimate" (\$10 M) reflects the costs of installing screens on five units at John Day; the amount under Option 1.0 (\$7 M) is an estimate of the cost of screening only three units. The \$7 M also includes M&E, but does not include post-construction O&M. An important point, because there may not be enough O&M funding to maintain these screen systems in the future -- before committing to building additional ESBS systems, need to be sure where the money to maintain them will come from (Heinith). Phased implementation -- three units initially, more in subsequent years if M&E results look good -- will help answer some of those O&M-related questions; can't stop everything until all future uncertainties are answered (Anderson). NMFS was expecting units to be installed on five units next year, and will not be happy if only three are funded (Hevlin). 7/21/97 SCT Recommendation: No change.

? John Day Drawdown Evaluation: The \$750 K shown for this item includes \$250 K for the initial scoping required by Congress, plus \$500 K to begin work on the drawdown study itself. The \$500 K covers the amount of work we think we can accomplish during next fiscal year if Congress gives us the go-ahead for the study in the third quarter of FY'98 -- by January 1998, Congress will have a regionally-coordinated study plan of how to proceed with John Day drawdown (Anderson). Total estimated cost of the drawdown evaluation: \$3.2 M. 7/21/97 SCT Recommendation: Fund at \$750 K for FY'98.

? The Dalles Surface Bypass: The FY'98 cost of this item was reduced by \$1.72 M (from \$3.42 M) by deferring or eliminating the following components: model studies, blocked trash rack test, outfall relocation engineering and much of the project support. 7/21/97 SCT Recommendation: Keep FY'98 funding level at \$1.72 M.

? Bonneville Surface Bypass: In FY'99, the Corps had scheduled a corner collector test at Powerhouse II, a guidance curtain test and continued testing of the '98 prototype -- there was a lot going on. From the Corps' perspective, if something needed to be delayed a year, the corner collector test made the most sense -- that accounts for \$1.5 M of the \$2.3 M savings under Option 1.0 for this item (Stuart Stanger). It may also make sense to delay design work on the Phase II prototype for Powerhouse I (\$200 K in FY'98 savings) and to postpone the outfall dewatering study (\$600 K in FY'98 savings) needed for the

Phase II prototype (Stanger). The guidance curtain and 1998 prototype tests will go forward as scheduled. The contract to purchase the steel for the outfall piers (\$1 M) will be advertised tomorrow; the outfall construction contract (\$5 M) will be advertised on August 18; the main contract, including the DSM changes, transportation flume and monitoring facility (\$29 M) will be advertised September 21. 7/21/97 SCT

Recommendation: Fund at \$2.3 M in FY'98 if funding available.

? Bonneville Adult Fallback. This item's FY'98 funding level was listed at \$300 K under "Current Estimate;" under Option 1.0, funding was cut to 0. 7/21/97 SCT

Recommendation: Restore funding to \$300 K for now.

? Gas Abatement Study: This item was listed at \$9.42 M under "Current Estimate;" under Option 1.0, its cost is shown as \$6.42 M. The dollars remaining are for alternatives analysis, design, engineering and modeling, field data collection and biological studies. The prototype basin raise, which model studies show will produce only a 4% reduction in TDG, is an obvious target for deferral (Anderson). Originally, you cut over \$4 M from this item -- what crept back in? (Hevlin). The cost of FY'98 prototype construction increased (COE). DGAS should be the topic of a joint SCT/DGT briefing in August (Anderson); Hevlin and DGT chair Mark Schneider to arrange a half-day meeting August 21. 7/21/97 SCT Recommendation: Leave funding level at \$6.42 M pending further discussion at the August meetings.

? Turbine Passage Survival: This item is listed at \$3.56 M under "Current Estimate," and \$1.1 M under Option 1.0, a reduction of \$2.46 M. To stay on schedule and produce the information needed to feed into the 1999 decision, estimate that we need \$3 M in FY'98 for testing at McNary Dam and hydraulic modeling at WES. If cut these two facets back to bare bones while still generating some of the info needed for 1999 decision, need a minimum of \$1.3 M in FY'98. Could also do minimum-gap runner test at Bonneville PHI for \$1.1 M in FY'98, bringing bare-bones FY'98 total to \$2.4 M. If program is funded at less than \$2.4 M, will have to choose between testing minimum-gap runner technology or minimum-gap runner test. Design team feels McNary work is more important (John Ferguson). 7/21/97 SCT Recommendation: Fund at \$3 M for now.

? Adult Passage -- Lower Columbia. This project was funded at \$2.1 M under "Current Estimate" and cut to \$1 M under Option 1.0, a savings of \$1.1 M. 7/21/97 SCT Recommendation: Fund at \$2.1 M pending further discussion.

? Snake River Auxilliary Water Supply. This project was funded at \$800 K under "Current Estimate" and cut to \$300 K under Option 1.0, a savings of \$500 K. 7/21/97 SCT Recommendation: Fund at \$300 K for now.

? Test Flume. This project was funded at \$2.3 M under both "Current Estimate" and Option 1.0. Need to make a decision on this item, because contract has to be let within one week -- if decide to fund the flume, will mean a fairly significant amount of money will not be available for another project -- Turbine Passage Survival Program or Lower Columbia Adult Passage. The flume is a good idea, but how much will the information it produces help us? Can we justify spending the money on this project if it means something else doesn't get funded? I wouldn't want to have to defend this project at the policy level (Hevlin). Test Flume Oversight Committee recommended unanimously that this project go forward, despite risks (Ferguson). 7/21/97 SCT Recommendation: No SCT objection if COE decides to issue flume construction contract.

If I add this up correctly, we've actually increased, rather than decreased, the level of funding for

many of these projects, such that the total under Option 1.0 is now \$106.6 million, said Anderson. My suggestion is that we finalize our list of must-haves -- the highest-priority items for FY'98. We can then look at everything else on the list of projects, both complete line-items and areas where we would be restoring funds to components of some of the high-priority items, in cases where we've made some cuts. In the course of that effort, we'll develop a set of rankings that will guide what will be funded, up to whatever amount Congress appropriates above the cost of the high-priority baseline program -- Priority #1, Priority #2, Priority #3 etc. That way, said Anderson, we're prepared for the worst-case scenario.

The group spent some minutes developing this prioritized list, ultimately producing the following summary:

CRFM FY'98 SCT Priorities

Highest Priorities Current \$ Estimate (000) Comments

Lower Granite

Extended-length screens	342	Post-construction evaluation
Juvenile bypass facility	0	Defer JBS design pending
test separator evaluation		
Surface bypass program	16,320	'98 prototype test only; no
planning and design for		
future surface bypass		
Fish ladder temperature control	0	Pending study

Little Goose

Extended-length screens	986	
Fish ladder temperature control	0	Pending study

Lower Monumental

Barge loading facilities	12	
Gate raise modifications	0	Pending study
Gantry crane	0	Pending study
Fish ladder temperature control	0	Pending study

Ice Harbor

Juvenile bypass facility	902	
Flow deflectors	1,633	Will likely increase
((\$500 k+/-))		
Fish ladder temperature control	0	Pending study

McNary

Extended-length screens 1,016
Screen maintenance facility 0
Fish ladder exit modifications 0 Defer; no biological benefit
Gate raise modifications 0

John Day

Monitoring facility 2,980
Flow deflectors 4,700
Surface bypass 2,200 Behavior only (subject to '97 results); defer skeleton bay and weir test
Drawdown evaluation 750 Current estimate for scoping and study initiation
Ringold 380
Extended screens test 0
Extended screens implementation 7,000 Reduce number of units screened by spring '98

The Dalles

Emergency water supply 120
Spillway and sluiceway survival 1,500
Adult channel dewatering 20

Bonneville

Power distribution 90
PH2 DSM, outfall, monitoring 21,750
PH1 DSM, outfall, monitoring 2,600
PH1 FGE 3,900
Comprehensive evaluation 0
Adult fallback 300
Flat plate 50

System

Gas abatement study 5,420 Defer basin raise; reduce biological field data
Turbine passage survival 1,100 Reduced scope --program deferral/delay; Bonneville minimum-gap runner test only
Acoustic technology 0 Defer/suspend
Adult passage -- Lower Col. 1,000 Do only highest-priority items in FY'98
Lower Snake study 6,330
Lower Granite turbine model 500
Fish ladder temperature control 120
Separator evaluation 2,500

Barge exit modifications	0	
Additional barges	1,315	
Auxilliary water supply -- Snake	300	Scope to original plan
FGE test planning (new)	200	
Highest-Priority Subtotal	88,336	

Next-Highest Priorities In Order Cumulative

- 1) Bonneville PH1 7,600 95,936 Defers outfall dewatering and surface bypass B2 surface bypass (\$2.3M)
- 2) John Day extended screens 3,000 98,936 Appx. two additional units screened in 1998
- 3) Dissolved gas abatement 1,000 99,936 Additional scope -- subject of 21 August joint DGAS/SCT/DGT meeting
- 4) The Dalles surface bypass 1,700 101,636 Behavior only; blocked trashrack and outfall deferred
- 5) Turbine survival 1,900 103,536 Restore full scope -- includes McNary testing and other elements deleted at \$1.1 M level above
- 6) Test flume 2,300 105,836
- 7) Bonneville PH2 FGE 1,200 107,036
- 8) John Day surface bypass 700 107,736 Add weir testing
- 9) Lower Granite SBC dewatering 500 108,236 Planning, E&D for FY'99

Other Potential Requirements or Deferred Work (no rank order)

Ice Harbor flow deflectors	500	Per note above
Adult passage -- L. Col.	1,100	
John Day drawdown eval.	2,250	
Bonneville surface bypass	2,300	Outfall dewatering and B2 surface bypass
The Dalles surface bypass	1,720	Add blocked trashrack and outfall
Auxilliary water supply -- Snake	500	Broader scope

Getting back to a question asked earlier in the meeting, said Anderson, does anyone object if the Corps goes ahead and advertises the initial contract for the test flume (\$1.02 M) as scheduled, with award in mid-September? We can always advertise it, then make a decision not to award the contract if Congress provides a lesser appropriation. No SCT objections were raised to this course of action.

Development of Performance Criteria for Lower Granite Surface Bypass Collector and John Day Extended Bar Screens.

Chris Toole, Jim Ceballos and I have worked out a proposal on this issue, said Hevlin.

As you'll recall, this request came from a recent CBFWA meeting; the IT also supported developing these criteria. The result was the following document (Enclosure G), which lays out a "straw-fish" criteria proposal to serve as the basis for today's discussion.

Toole spent a few minutes going through NMFS's "straw-fish" proposal, adding, by way of preface, that the Corps has a report from Gary Johnson, Al Giorgi et al on this subject; if you look at page 50 of that report, it suggests several different options as far as surface collector performance criteria, he said. What we're proposing is a combination of two of their criteria options. In simplest terms, the main point of this "straw-fish" proposal is that the criteria for a final surface collector should be based on the proportion of fish going into the collector and screens, vs. the proportion of fish approaching the project, Toole said. The bottom line is that your criteria would be some magic number that captures the efficiency of the screens plus the surface collector, relative to the fish passing into each of those, plus the turbines, after you've accounted for fish that were spilled. Please see Enclosure G for details of Toole's presentation.

One overall comment, said Boyce -- this looks only at the direct effects of the surface collector, but does not address any of the other potential benefits of a surface collector in terms of reducing delay at the project and accelerating migration to the ocean. That's certainly something that's open to discussion, said Toole. The main reason I didn't try to incorporate that in this proposal is, what are you going to measure? The test is designed to measure routes of passage -- you'll have no idea how that translates to survival.

I think this is very helpful, said Anderson -- perhaps the logical place to continue this discussion is at the FFDRWG/AFEP level, where we could ask them to flesh out these criteria further on paper, including, perhaps, some criteria to address forebay delay, if such a performance standard can be developed. I'm certainly not opposed to having the SCT oversee that effort, but I'm not sure this is the appropriate group to synthesize all of the available data into performance standards.

We got into this whole surface collector can of worms because it was offered as a potential alternative technology to get the JBS systems, which are injurious to fish, out of the projects, said

Woodin. It seems like our first question should be, can this technology reasonably be expected to replace JBS systems? So far, it's a flat-out no, from what I've seen. If all these systems are going to do is give you an extra 5% FGE, is it really worth spending \$50 million per project to install them?

What I would suggest is that we take a look at the results of the PATH spring/summer chinook analysis this September, to see if it's really as helpful as I think it's going to be in developing these criteria, said Toole. If it isn't, then we'll still have some time to develop ad hoc criteria.

I'm assuming, however, that it is going to be helpful.

So where do we go from here with this topic? asked Hevlin. What I would suggest is that this isn't going to happen at the main FFDRWG meeting, said Toole. It might be more effective to put together a subgroup of interested people from SCT, FFDRWG and PATH, to look at what our model assumptions should be about surface collectors, and conversely, how we might use that output to develop 1998 test decision criteria. I can start getting something like that set up,

Toole said.

Review of Revised Project List for the FY'99 CRFM, Development of Preliminary FY'99 Budget.

Anderson agreed to produce an FY'99 spreadsheet, reflecting the decisions made about FY'98 at today's meeting, for discussion by the SCT at its August conclave.

Report from the John Day Test Flume Oversight Committee.

John Ferguson reported that the Test Flume Oversight Committee had held its second meeting on July 14, to discuss issues associated with test protocols, hydraulic test parameters, scale up, flume effects on fish behavior, monitoring and study-related statistical issues. The second purpose of the meeting was to determine whether the oversight committee supports proceeding with flume construction and biological testing. The meeting was attended by representatives from NMFS, USGS, ODFW, WDFW, Chelan PUD and the Corps of Engineers.

The bottom line, said Ferguson, is that, when polled at the end of the meeting, every representative supported the test flume program with either a "yes" or a "qualified yes;" no one objected to the program. In the course of the meeting, we also identified a number of risks associated with the program -- concerns that will have to be addressed during future committee meetings and the study. These include:

- ? monitoring (infra red or low light cameras)
- ? scale-up of flume results to field conditions
- ? concerns that the flume itself will influence behavior
- ? fish handling issues.

Some participants, notably Rod Woodin, felt the level of risk associated with this project is very high, Ferguson said. It was agreed that, if the SCT funds the test flume program for FY'98, the oversight committee will reconvene to discuss how best to execute the program, and to divide up the various responsibilities among the participating agencies, said Ferguson. If the project is funded, we'll proceed with construction and the first year of testing.

FFDRWG and SRWG Updates.

No updates were presented at today's meeting.

Discussion of the Three Future Recovery Scenarios in the Multi-Year Implementation Plan.

This issue arose from the economic analysis that is being worked up in support of the NMFS Recovery Plan, Hevlin explained -- what will the plan ultimately cost to implement? John Palensky has been helping to develop that analysis, using the three recovery scenarios developed in the Multi-Year Implementation Plan. I was asked to look that over, said Hevlin, and the first thing that was asked was whether or not we could separate out John Day drawdown

from Lower Snake Drawdown. One of the things I did was to cost out Lower Snake drawdown only, and I wanted to present that here, to see whether there was any support for that as another option.

The other suggestion I had was that, in the transportation option, there were four surface collectors costed out as part of that analysis, Hevlin said. That didn't make any sense to me -- why would you want to put in a surface collector at Lower Monumental and McNary, if improved transportation is the option chosen in 1999? If you have surface collectors at Lower Granite and Little Goose, such that your collection efficiency at those two projects is 90%+, why spend \$300 million to install surface collectors at the other projects downstream? Anyway, we can discuss these items at the next SCT meeting, but in going through this analysis, these were the things that jumped out at me, Hevlin said -- I just wanted to bring them to your attention now. I'll put together a packet of information, and send it out prior to the August SCT meeting.

One other option to consider is drawdown at Lower Granite and Little Goose, with surface collection at Lower Monumental and Ice Harbor, suggested Boyce. Agreed, said Ruff.

Hevlin distributed Enclosure H, which lays out a variety of cost information related to the three future recovery options. In the chart on page 1, the "Base Plan" shows the costs of the SCT's planned activities through 2000, he explained. "New MOA Investment" is similar to the base plan, but takes into account that fact that BPA will have paid off some of the projects we're implementing right now. The next three lines, "Drawdown Option," "Bypass Option" and "Transportation Option," reflect the estimated costs of the three main recovery scenarios for the years 2000-2007.

In reviewing this information, I saw several ways to make this more useful, Hevlin continued. The second page (of Enclosure H) reflects my suggested modifications to this chart. The rest of the attached pages are simply the Multi-Year Implementation Plan's descriptions of each scenario. Suggested modifications (in 1996 dollars) include:

- ? 1) Include a new option reflecting drawdown of the Lower Snake River projects only
 - a) Minus \$1 billion to exclude John Day drawdown
 - b) Plus \$100 million to include John Day passage improvements
- ? 2) Modify transportation option
 - a) Minus \$300 million for surface collectors at Lower Monumental and McNary
 - b) Add \$100 million for gas abatement

Two points related to the last option, said Anderson -- if NMFS is going to argue [inaudible] Snake River listed stocks. If you're going to argue that, you need transport at McNary. Also, if we're not going to continue with the dewatering studies, we're not going to be on this kind of a schedule for surface collector development.

We understand that at this table, said Hevlin -- this schedule was laid out last year. The only problem is, this is going to be included in the Recovery Plan, which is scheduled to go out for internal NMFS review within a week. It seems to me that you have to deal with the Lower River, even if you're picking up most of the currently-listed fish in the Snake, said Anderson. I would also suggest that you don't need to add that \$100 million for gas abatement under the transport option.

Review of Draft June 16 SCT Meeting Notes.

No comments were provided on the notes at today's meeting.

Next SCT Meeting and Agenda Items.

The next two meetings of the System Configuration Team were set for Monday, August 18 and Monday, September 15, from 9 a.m. to 4 p.m. in the fifth-floor conference room at NMFS's Portland offices. As far as our August agenda, Hevlin said, we'll have at least a brief update on the FY'98 project list; we'll get FFDRWG and AFEP updates at that meeting; we'll get a report from the Studies Review Work Group, including any issues arising from that process; we'll also talk about FY'99. Also, as I said at the beginning of the meeting, we're looking for some input from SCT in terms of the substance, scope and focus of the workplan package we handed out earlier today, Anderson said -- any comments you could provide at the August meeting would be useful. We'll talk about all dissolved gas-related activities at the meeting on August 21 Hevlin added. Meeting notes prepared by Jeff Kuechle, BPA contractor.